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ECONOMICS OF PIPE LINE FINANCING

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ECONOMICS OF PIPE LINE FINANCING

Charles J. Hodge[1]

SYNOPSIS

There are noted herein the benefits which have accrued to the economy as a whole due to the pipe line. After a brief discussion of the crude oil, natural gas and products pipe lines, there are discussed some of the preliminary steps to be taken prior to financing, and the paper concludes with a discussion of the approaches to the actual financing.

It has often been said that our modes of transportation; airplanes, high-speed automobiles, trucks and high-speed trains have substantially reduced the obstacles of time and space. It goes without saying that this progress in transportation has had a pronounced effect on the world, both militarily and economically. And pipe lines, which move more domestic freight than our trucking industry, have also succeeded in overcoming these same obstacles of time and space. They have played a major part in the fantastic growth of the petroleum industry. Generally speaking, any major development which has contributed to the growth of an industry, of necessity, represents a sizable investment on the part of companies and of individuals. The pipe line is no exception.

This enormous investment in pipe lines has increased payrolls, added greatly to the consumption of steel and power, and has been of great benefit to the construction industry, as you well know. More important, I think, is the fact that practically every individual in this nation has benefited from the pipe line.

Let me point out one example in particular; namely, the natural gas pipe line. It wasn't so many years ago that natural gas in the ground was "going begging," with much of it being flared off into the atmosphere. We knew there was a tremendous volume of it. We also knew there was a large demand for natural gas, especially for residential consumption in metropolitan areas, but we also knew a bridge was needed to bring the forces of supply and demand together. This bridge turned out to be a pipe line, and once the pattern was formed, natural gas in these remote areas became economically important to the entire nation. In particular, those states which have abundant reserves of gas have benefited substantially from the pipe lines. Moreover, if you contrast today's well-head price with that of fifteen years ago, you cannot escape the conclusion that the pipe line has added untold value to our national resources.

For the purposes of this discussion, I should like to divide pipe lines into four categories; three conventional and one unconventional. The three

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conventional categories are: crude oil pipe lines, natural gas pipe lines and products pipe lines. The unconventional category, such as the handling of solids and chemicals, which includes coal, lies somewhere in the future, but the probabilities of its development are promising. I intend to discuss only the financing of the conventional pipe lines, and I will start with the

Crude Oil Pipe Line

The crude oil pipe line is the oldest type of Petroleum pipe line. This is not surprising since the crude pipe line has been the life line for the refiner and the integrated oil company. Being a life line, it is also not surprising that the crude oil pipe line is controlled or owned by the oil company or by the refiner. This, I believe, is essential, and being essential, we then find that most of the funds required for the construction and operation of crude oil lines have been provided by the oil companies and refiners.

There has, therefore, been very little need for public financing of crude pipe lines. When funds have been raised to construct a crude line, they have been raised under the name of the individual oil company or refiner and have not been directly related to the construction or operation of the crude line. As a result of these two factors, the role of the investment banker has been minor in the financing of crude lines.

Natural Gas Pipe Lines

On the other hand, the problem of company control, does not loom as large for the natural gas pipe line as it does for the crude line because the natural gas pipe line carries its product to a public market. The result has been that the great majority of natural gas pipe lines have been financed publicly.

The growth of the natural gas pipe line industry has been tremendous. In 1946 there were 226,500 miles of natural gas pipe lines versus 393,900 at the end of 1953. This is an increase of 74% in the short span of seven years. Considering the cost per mile of pipe line to be well up in the thousands of dollars, the investment in natural gas pipe lines alone reaches into the billions of dollars. I should like to point out to you some of the factors which have entered into the financing of these billions of dollars of natural gas pipe lines.

Since the natural gas pipe line companies operate under the jurisdiction of the Federal Power Commission, one of the first steps to be taken is to secure a Certificate of Necessity from that Commission. This is not an easy task. To put it very simply, the Federal Power Commission requires that you

1) have proven reserves of natural gas available to the pipe line either owned in fee or contracted for which assure that the gas will be available for a period of at least twenty years or more to meet the initial requirements of your market.
2) have contracts and evidences of need and salability of the gas in the markets which you plan to serve.
3) back up your representations by geological studies and by marketing studies.

The detail work involved in meeting these requirements is staggering and I am sure would be of little interest to you at this time.

The Federal Power Commission also requires that you have Letters of Intent from capital sources stating that they are able to supply the investment funds necessary for the construction and for the operation of the pipe line

company in its initial stages. At this point you run into that old saw—which comes first, the chicken or the egg? Obviously, the money is not going to be advanced unless the pipe line company is permitted by the Federal Power Commission to earn a sufficient rate of return to service the debt and to bring down sufficient earnings providing a fair return to equity-holders. The latter objective is a very tender point at this stage of the financing. Our country has progressed to its present high level of economic development only by the use of capital which was courageous enough to go into new ventures. The rate of return on this capital must be commensurate with the risks of a new enterprise if capital is to be attracted. If the rate of return is not attractive, this capital will seek other more attractive outlets.

Having secured the Certificate of Necessity and satisfied the requirements which I have mentioned, the natural gas pipe line company then gives the green light to its investment banker to go ahead definitely with the financing plans. The investment banker who has been working with the new company and has secured Letters of Intent for the debt, usually from large institutional sources of funds, then proceeds to form a group of investment bankers for the purpose of buying the equity from the company. This step permits the issuance of the large amount of debt and allows the company to finalize its plans. The group of investment bankers turns around and sells these equity securities to investors in all sections of the country. The pipe line company is then officially born.

I have not said that the pipe line is officially in business because of the many problems and hazards which arise even after one has the funds. There are hazards of varying steel prices, hazards of providing the necessary right-of-way at a reasonable cost, hazards of delays in receiving the necessary equipment, and many others. It is not an easy task. However, the investment in natural gas pipe line companies has proved to be very sound, and has, in my opinion, given a fair return to the investor in most cases. It has, however, become more and more difficult in recent years to secure the proper rate of return.

In concluding my remarks on natural gas pipe lines, let me summarize the character of a natural gas pipe line company:

1) The company must own or have contracts for the supply of gas in volume sufficient to assure efficient service.
2) It must have a market for the sale of such gas.
3) It must operate under the jurisdiction of the Federal Power Commission, which Commission sets forth the rate of return.
4) It must rely upon the successful public offering and distribution of its securities.

I bring these points out because a natural gas pipe line is not just a transportation company; it is also a geological, marketing, legal, and financial company. It is a geological company because it must concern itself with future reserves of gas. It is a marketing company because it must also market the product. It is a law firm because its cases on rates are constantly being argued before the Federal Power Commission, and it is a financial company because it must continually come to the markets for more capital and must insure a fair rate of return for that capital.

Now I want to discuss with you the most promising present day development in pipe lines,—the Products Pipe Line.

Products Pipe Line

A products pipe line, as you know, ships all grades of clean petroleum products, such as premium gasolene, house-brand gasolene, aviation gasolene, jet fuel, kerosene, distillates and liquid petroleum gasses, the latter including butane and propane.

Whereas the natural gas pipe line has had a dynamic growth and, from all indications may be approaching maturity, the products pipe line should be classified as a rapidly growing infant.

From 1940 to 1950 products pipe line mileage increased from 7,000 miles to 21,898 miles, and at present, there are approximately 33,750 miles in operation. This represents an outstanding rate of growth. While it is generally thought that this rate of growth will taper off somewhat, many competent industry observers predict a future steady growth which will continue to be beneficial to the petroleum industry, to the public, and to the defense program of the nation.

The impact of the products pipe line on the economy of the nation has resulted in the reduction of product cost to the consumer and has offered a more efficient and less costly distribution of products to areas which previously presented difficult marketing problems. I should not like to get involved in any serious discussion with marketers or refiners concerning the competitive effects which the products pipe line may have had on them, because I'm sure I would be out over my head, nor would I care to discuss the impact which the products pipe line has had on our railroad system. In each case, however, I believe that it would be difficult to refute the arguments that 1) the products pipe line is the most economic and efficient means of shipping petroleum products and 2) it is what the public wants because of the effect which the line has had on the reduction, or holding down of consumer prices.

For purposes of this discussion, I should like to divide products pipe lines into two classes; the shipper-owned pipe line, and the non-shipper-owned pipe line, both of which are normally common carriers. An example of what I mean by a shipper-owned pipe line is the Plantation Pipe Line which is owned by several oil companies and refiners and has served so well the Southeastern part of this nation both in peace and in war. A typical example, on the other hand, of a non-shipper-owned pipe line, which is publicly owned, is the Buckeye Pipe Line which serves Pennsylvania and New York State.

As in all cases of transportation systems which affect the public welfare, these pipe lines have come under the scrutiny of governmental agencies. Both classes of products pipe lines operate under the jurisdiction of the Interstate Commerce Commission. In addition, however, the shipper-owned lines in the past have also been subject to the close scrutiny of the Department of Justice. The Elkins Consent Decree of 1941, which resulted from action taken by the Department, in a broad sense, can be considered a restrictive degree in so far as it relates to the profits which can be carried through to the owners of a shipper-owned line. I do not feel that I should go deeply into the merits of this Decree at this point, but I might say that this has been one factor in the trend toward non-shipper-owned lines.

The construction of the products pipe lines to date has required very substantial amounts of capital. In most cases, however, you will find that this capital has been provided by the oil companies or the refiners and has flowed into the contruction of shipper-owned pipe lines. But because of the trend toward non-shipper-owned lines, I believe that the substantial amounts of capital required for these lines will be provided by a much broader public participation than we have seen before.

I have reviewed some of the problems of financing a natural gas pipe line, and I should now like to discuss some of the problems of financing a non-shipper-owned products pipe line.

Estimates of the cost of construction run anywhere from $25,000 to $50,000 per mile depending, of course, upon the terrain, size of pipe and other factors. You can see at this point that any conversation pertaining to a fair-sized pipe line immediately represents a substantial sum of money. I am sure you have all heard the term, "Money appears to be easy" meaning that you can borrow at a low rate of interest, but in the investment business we also have a saying, "Money is easy up to the time you try to get it."

A rule of thumb usually followed in seeking capital for a pipe line venture is to obtain long term debt funds constituting between 60% and 75% of the total capitalization. This debt must obviously come from the institutions, such as insurance companies, pension funds, universities, and certain foundations which are best equipped to supply capital of this type. It is not a simple matter to convince these great sources of capital that they should lend this money to a pipe line project. While most of them are favorably inclined toward the industry, they have a great responsibility to insure that these funds are placed into sound projects.

In the case of the non-shipper-owned line, any lending agency will have to be convinced that the project is sound. The lending authorities have to be convinced, over and above the paper economics of the line and the desirability of serving the proposed area, that the traffic will actually flow through in sufficient volume to guarantee service on the debt and to provide the necessary margin of safety. This convincing takes a lot of doing. The easiest way is to negotiate what is known as a "throughput agreement" with each of the proposed shippers. Under this agreement the shipper contracts to ship a specified number of barrels per day through the line. This agreement is not easy to obtain, but if obtainable from responsible sources, the job of financing becomes much easier.

An alternative approach is to obtain a Letter of Intent which warrants that the shipper intends to ship a specified amount of product through the projected pipe line. I personally believe that once a responsible shipper has given evidence of his intent, this evidence provides a suitable prop for financing. Unfortunately, there are those who disagree with me, some of whom are the people who have the funds to lend. They are therefore more than worthy opponents. I believe, however, that progress will be made in the construction of non-shipper-owned pipe lines by using Letters of Intent.

The firm of Glore, Forgan & Co. at the present time is associated with the Kaneb Pipe Line, which was financed on the basis of Letters of Intent. I am confident that the intention as evidenced by Letters provided by responsible refiners will be carried out, although there is no legal obligation. Kaneb has been operating for about a year now (as of 1954) and has successfully moved all the products which I have previously mentioned. Incidentally, Kaneb is delivering substantial quantities of Jet fuel to major air bases, and this is the first time that a private pipe line has done so. This opens a completely new field to pipelines. Kaneb, I believe, takes the lead in demonstrating a method of financing for future projects of this nature.

I have explained the procedure through which you must go to secure the debt monies for the pipe line. The next step is to raise the remaining 25% to 40% of equity money by either going to substantial venture capital funds which specialize in purchasing equities of this nature, or by going to the public. Often it is easier to secure funds from private institutional or individual sources; hence, one reason for the term "Private Placement." This is

especially true if the project is not of such magnitude as to put a strain on the resources of these private sources. If it is, then we turn to public distribution. Since the initial successes of the natural gas pipe line financings, this type of financing has become more and more popular with the public with the result that the public route has become easier than it used to be.

I should like to point out, however, that while the investment banker must at all times convince himself of the soundness and profit potentialities of his product, he must exercise almost superhuman care in preparing a venture capital financing for the public. The large private sources of venture capital approach a pipe line financing in a very sophisticated manner and by making exhaustive checks to satisfy themselves that the project is feasible. The individual investor has neither the time nor the resources to satisfy himself in such a manner and must rely almost entirely upon the representation of the investment banker. I do not mean that individuals should not invest in venture projects of a sound nature, because as you all know, this country was built on this principle. What I do mean, however, is that the utmost care must be taken in financing publicly so that the individual's funds and future projects of merit are not jeopardized.

I should like to touch on one of the most important parts of the creation of a non-shipper-owned products pipe line. This is Management. It's the same old story, for if there are good, able, honest people managing the pipe line, you will find that, where a serious error in judgment has not been made, the project will work out to the satisfaction of all concerned. This is certainly a basic factor in the proposals for any new project.

CONCLUSION

Over the next decade, the products pipe line will enjoy a tremendous growth and there will be variations from the existing conventional line. There is a substantial market for financing these lines, and the investor will enjoy substantial returns on his investment. Mistakes will be made, of course, but the non-shipper-owned products pipe line will become more and more a favored place for the investment of fuels.

The role of the investment banker in the underwriting of crude, natural gas and products pipe line companies has been good for the economic growth of the nation, has been good for the investor, and has aided the defense program of this country.

The investment banker stands ready and willing to aid in the inevitable future growth of this pipe line industry.